



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.              | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------------------|------------------|
| 10/796,664   | 03/08/2004  | Donald Bruce Campo   | TH-2606 (US)                     | 3145             |
| 23632  | 7590        | 10/04/2005           |                                  |                  |
| SHELL OIL COMPANY<br>P O BOX 2463<br>HOUSTON, TX 772522463 |             |                      | EXAMINER<br>STEPHENSON, DANIEL P |                  |
|  |             |                      | ART UNIT<br>3672                 | PAPER NUMBER     |
| DATE MAILED: 10/04/2005                                    |             |                      |                                  |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

*He*

**Office Action Summary**

Application No.

10/796,664

Applicant(s)

CAMPO, DONALD BRUCE

Examiner

Daniel P. Stephenson

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/15/05, 3/8/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because in figure 13, what is represented by reference numeral "223", should be referenced by --213--, and in figure 14, what is represented by reference numeral "401", should be referenced by --1401--. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "401" in relation to figure 4, where it should point to the upper end of the casing. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid

Art Unit: 3672

abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

3. The disclosure is objected to because of the following informalities: on page 15 line 18, the reference numeral "219" should be reference numeral --223--, and reference numeral "217" should be --221--.

Appropriate correction is required.

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The abstract of the disclosure is objected to because it is one long sentence; it should be in narrative format. Correction is required. See MPEP § 608.01(b).

***Claim Objections***

6. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not). In the present case there are two of claim 3 and claim 7.

Misnumbered claims 3<sup>2</sup>-10 have been renumbered 4-12.***Claim Rejections - 35 USC §***

***102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by the WIPO document '788 to Lohbeck. WIPO '788 discloses method for providing a casing in a wellbore wherein another casing of the same internal diameter may be provided in the wellbore below the casing. It provides an overlap between the casing and the other casing sufficient to provide a hydraulic seal between the two casings. The method includes the steps of: placing a casing (155) within the wellbore wherein the casing has a smaller outside diameter than a final inside diameter of the casing; placing an expandable mandrel (130,115) within the casing, the expandable mandrel suspended from a drill string; converting the expandable mandrel to a first

Art Unit: 3672

expansion diameter while the expandable mandrel is within the casing wherein the first expansion diameter is about the final inside diameter plus twice the thickness of the final casing; forcing the expanded mandrel through a lower portion of the casing while the expandable mandrel is of the first expansion diameter; converting the expandable mandrel to a second expansion diameter (115), wherein the second expansion diameter is about the final inside diameter; and forcing the expanded mandrel through an upper portion of the casing while the expandable mandrel is of the second expansion diameter. Converting in this case has been broadly read as preparing the mandrel in a first diameter. The casing is provided with a pre-expanded (135) portion that the mandrel is converted in. There is a cement shoe (140) provided on the casing, which is later drilled out. The casing thickness will be determined by the necessities of the formation to be cased and the size of the wellbore drilled.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO '788 in view of the pre-grant publication '433 to Ring et al. WIPO '788 shows all the limitations of the claimed invention, except it does not disclose that the mandrel is expanded through hydraulic force provided by a dart that is placed through the tool. Ring et al. '433 discloses the use of a dart to increase the fluid pressure within an expansion tool for hydraulic activation of the expanders. It would have been obvious to one of ordinary skill in the art at the time the

Art Unit: 3672

invention was made to use the dart of Ring et al. '433 with the method of WIPO '788. This would be done because it is common knowledge within the downhole tool art to use darts or balls to close off passages for the increase of hydraulic pressure, and to use hydraulically activated expansion tools.

11. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO '788 in view of Ring et al. '433 as applied to claim 5 above, and further in view of the pre-grant publication '262 to Musselwhite et al. WIPO '788 in view of Ring et al. '433 shows all the limitations of the claimed invention, except it does not disclose that there is a secondary seal for blocking fluid flow from the drill string. Musselwhite et al. '262 (Figures 8 and 9) discloses a secondary sealing mechanism that is activated by a dart (paragraph 42) downhole which includes a plurality of flapper valves. The valves are not exposed to the fluids flow previous to the activation using the dart. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the flapper valves of Musselwhite et al. '262 with the apparatus of Smalley et al. in view of Ring et al. '433. This would be done to provide a more robust seal to the flow of fluid.

***Allowable Subject Matter***

12. Claims 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 3672

*Conclusion*

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Smalley et al., Campbell et al., Mills et al. and the pre-grant publication '796 to Baugh et al. all show similar elements to the present invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel P. Stephenson whose telephone number is (571) 272-7035. The examiner can normally be reached on 8:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

DPS *pps*